# Natural Communities of Louisiana

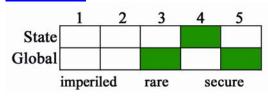






# Cypress Swamp & Cypress-Tupelo Swamp

Rarity Rank: S4/G3G5



*Synonyms:* Freshwater Swamp, Brake, Swamp Forest, Cypress Slough

#### **Ecological Systems:**

CES203.490 Lower Mississippi River Bottomland Depression

CES203.065 Red River Large Floodplain Forest

CES203.384 Southern Coastal Plain Nonriverine Basin Swamp

CES203.459 West Gulf Coastal Plain Near Coast Large River Swamp



- Forested, alluvial swamps growing on intermittently exposed soils most commonly along rivers and streams but also occurring in backswamp depressions and swales
- Soils are inundated or saturated by surface water or ground water on a nearly permanent basis throughout the growing season except during periods of extreme drought
- All swamps, even deepwater swamps with almost continuous flooding, experience seasonal fluctuations in water levels
- Generally occur on mucks and clays, and also silts and sands with underlying clay layers (Alfisols, Entisols, Histosols, and Inceptisols)
- Relatively low floristic diversity, and associate species may vary widely from site to site
- Undergrowth is often sparse because of low light intensity and long hydroperiod
- Establishment of young trees can only occur during periods of exceptionally long drought, since neither baldcypress nor tupelo gum seeds germinate underwater, nor can young seedlings of these trees survive long submergence
- Swamps tend to be even-aged stands since the environmental conditions favorable for germination and establishment of saplings occur very infrequently, and also baldcypress is an intolerant tree species requiring high light conditions for establishment and successful growth
- Provide important ecosystem functions including maintenance of water quality, productive habitat for a variety of fish and wildlife species, and regulation of flooding and stream recharge

Plant Community Associates

Common overstory tree species include:

Taxodium distichum (baldcypress)

Nyssa aquatica (tupelo gum)



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### Common midstory & understory species include:

Nyssa biflora (swamp blackgum)
Fraxinus pennsylvanica (green ash)
Acer rubrum var. drummondii (swamp red maple)
Gleditsia aquatica (water locust)
Cephalanthus occidentalis (buttonbush)

Fraxinus profunda (pumpkin ash) Salix nigra (black willow) Planera aquatica (water elm) Itea virginica (Virginia willow)

### Federally-listed plant & animal species:

Haliaeetus leucocephalus (bald eagle)

*Ursus americanus luteolus* (Louisiana black bear)

Bald & Golden Eagle Protection Act; G4; S2N, S3B

Threatened; G5T2; S2

## Range:

Cypress-tupelo swamps may be found throughout Louisiana in all river basins, and sizeable areas of swamp still remain, even though the historic extent is considerably reduced. Statewide estimates of swamp loss range from 25 to 50 % of the original presettlement acreage and old-growth examples are very rare.

#### Threats:

- Agricultural, industrial and residential development
- Saltwater intrusion and subsidence
- Hydrological alterations (to include adjacent areas)
- Construction of roads, pipelines or utilities
- Logging on permanently flooded sites where natural or artificial regeneration is not feasible
- Soil damage from timber harvesting or industrial activities
- Contamination by chemicals (herbicides, fertilizers)
- Invasive exotic species

#### Beneficial Management Practices:

- Prevent conversion of existing natural forests to other land uses
- Strictly follow Best Management Practices guidelines
- No logging on permanently flooded sites where natural or artificial regeneration is not feasible
- No logging or heavy equipment use on flooded or saturated soils
- Remove any invasive exotic plant species with use of spot herbicides or mechanical means

